PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032

Fax

Registration No. (Attorney/Agent)

45,712

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## UTILITY PATENT APPLICATION TRANSMITTAL

Country

Signature

Name (Print/Type)

Sanders N. Hillis

11336/513 (P03087US) Attorney Docket No. Gerald R. Stanley First Inventor SERIES INTERLEAVED BOOST CONVERTER POWER FACTOR CORRECTING POWER SUPPL

Express Mail Label No. EV227676912US (Only for new nonprovisional applications under 37 CFR 1.53(b)) Assistant Commissioner for Patents APPLICATION ELEMENTS ADDRESS TO: **Box Patent Application** See MPEP chapter 600 concerning utility patent application contents. Washington, DC 20231 Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) Specification [Total Pages (preferred arrangement set forth below) 3. Computer Readable Form (CRF) - Descriptive title of the invention b. Specification Sequence Listing on: - Cross Reference to Related Applications i CD-ROM or CD-R (2 conies); or

|   | arding Fed sponsored R & D                                       | " -   | ] 00-1001010100-17 (2                                      |                         | $\approx$ |  |  |
|---|--|---|--|-------------------------|-----------|--|--|
|   | equence listing, a table,  | ii. 「   | ] paper  | 2                       |           |  |  |
| or a computer p   |  | 4 F-F-:   |  |                         |           |  |  |
| - Background of   | c Sta  | atements verifying identity                             | y of above copies 🛚 💁                                      | i                       |           |  |  |
| - Brief Summary   | ACCO   | ACCOMPANYING APPLICATION PARTS                          |  |                         |           |  |  |
|   | on of the Drawings (if filed)                                    | ACCO  | MEANTING AFFLIC  | MITON PARTS             |           |  |  |
| - Detailed Descri   | 9. 🗸 Assi  | ignment Papers (cover si                                | heet & document(s))  |                         |           |  |  |
| - Claim(s)  | <b>-</b> 1   | 37 (  | CFR 3.73(b) Statement                                      | Power of                |           |  |  |
| - Abstract of the   | 10. (wh  | en there is an assignee)                                | Attorney   |                         |           |  |  |
| 4. Drawing(s) (35 U   | J.S.C. 113) [ Total Sheets 14 ]                                  | 11 Eng  | glish Translation Docume                                   | ent (if applicable)     |           |  |  |
| 5. Oath or Declaration  | [ Total Pages 1  | 13912   | rmation Disclosure   | Copies of ID Citations  | S         |  |  |
| [Z]   | •                          | == 51a  | tement (IDS)/PTO-1449                                      | Citations               |           |  |  |
| a. Land Newly exect   | uted (original or copy)<br>a prior application (37 CFR 1.63 (d)) | 1   | eliminary Amendment  |                         |           |  |  |
| b. (for continua  |  | turn Receipt Postcard (M<br>ould be specifically itemi: |  |                         |           |  |  |
|   | ION OF INVENTOR(S) atement attached deleting inventor(s)         | 15. Cer<br>(if f  | rtified Copy of Priority Do<br>foreign priority is claimed | cument(s)               |           |  |  |
|   | the prior application, see 37 CFR                                |   | npublication Request und                                   |                         |           |  |  |
|   | and 1.33(b).   |   | (2)(B)(i). Applicant must a                                |                         |           |  |  |
|   | and 1100(b).   |   |  | allach lotti P i O/Sb/S | 10        |  |  |
| 6. Application Data   | Sheet. See 37 CFR 1.76   | ) <del></del> -   | ts equivalent.   |                         |           |  |  |
| o Application Data  | Sileet. See 37 CFR 1.76  | 17. Oth   | ier:   |                         |           |  |  |
| 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,  |  |   |  |                         |           |  |  |
| or in an Application Data She   | et under 37 CFR 1.76:  |   |  |                         |           |  |  |
| Continuation  | Divisional Continuation-in-part (CIP)                            | of prior app  | lication No.:/_  |                         |           |  |  |
| Prior application information:  | •                          | or prior app  |  |                         |           |  |  |
| Prior application information: Examiner: Group Art Unit:  |  |   |  |                         |           |  |  |
| For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under   |  |   |  |                         |           |  |  |
| Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.  The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. |  |   |  |                         |           |  |  |
| 19. CORRESPONDENCE ADDRESS  |  |   |  |                         |           |  |  |
| r1  |  |   |  |                         |           |  |  |
| Customer Number or Bar Co   | ode Label (Insert Customer No. Gridtlech bar o                   | र्जाक विशेषां विशेषात्त्व)                              | or Correspond  | dence address below     |           |  |  |
| <del></del>   |  |   |  |                         |           |  |  |
| Name  |  |   |  |                         |           |  |  |
|   |  |   |  |                         |           |  |  |
| Address   | <u> </u>   |   |  |                         |           |  |  |
| City  |  | Stato   | Zin C  | odo.                    |           |  |  |

JUNE 24, 2003 Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

Telephone

Signature

PTO/SB/17 (01-03)

Approved for use through 04/30/2003. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

To Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| FEE TRANSMITTAL  |            |                             | Complet if Known |             |                            |  |          |  |
|--|------------|-----------------------------|------------------|-------------|----------------------------|--|----------|--|
| FEE TRANSMITTA   | \L         | Appl                        | ication          | Numt        | per Not                    | Yet Assigned   |          |  |
| for FY 2003  |            |                             | Filing Date      |             | Here                       | Herewith   |          |  |
| Effective 01/01/2003. Patent fees are subject to annual revision   | n          | First Named Inventor        |                  | ntor Gera   | Gerald R. Stanley          |  |          |  |
| <del></del>  |            | Examiner Name               |                  | Unkr        | Unknown                    |  |          |  |
| Applicant claims small entity status. See 37 CFR 1.27  |            | Art Unit Unknown            |                  |             | nown                       |  |          |  |
| TOTAL AMOUNT OF PAYMENT (\$) 1756.00   |            | Attorney Docket No.         |                  |             | No. 1133                   | 6/513 (P03087US)                                     |          |  |
| METHOD OF PAYMENT (check all that apply)   | T          | FEE CALCULATION (continued) |                  |             |                            |  |          |  |
| Check Credit card Money Order None   | 3. /       | 3. ADDITIONAL FEES          |                  |             |                            |  |          |  |
| Deposit Account:   | Large      | Large Entity   Small Entity |                  |             |                            |  |          |  |
| Deposit 00 4005  | Fee<br>Cod | Fee<br>e (\$)               |                  | Fee<br>(\$) | Fe                         | e Description  | Fee Paid |  |
| Account Number 23-1925   |            | 130                         | 2051             |             | Surcharge - I              | ate filing fee or oath                               | 100100   |  |
| Deposit<br>Account Brinks Hofer Gilson Lione   | 1052       | 2 50                        | 2052             | 25          |                            | ate provisional filing fee or                        |          |  |
| Name   | 1053       | 3 130                       | 1053             | 130         | cover sheet<br>Non-English | specification  |          |  |
| The Commissioner is authorized to: (check all that apply)  Charge fee(s) indicated below  Credit any overpayments          | 1          | 2,520                       | 1812             |             | •                          | quest for ex parte reexamination                     |          |  |
| Charge any additional fee(s) during the pendency of this application   | 1804       | 9201                        | 1804             | 920*        | Requesting p               | publication of SIR prior to                          | ł (      |  |
| Charge fee(s) indicated below, except for the filing fee   | •          | 1,840                       | 1805             | 1,840*      | Requesting p               | oublication of SIR after                             |          |  |
| to the above-identified deposit account.   | 1251       | 110                         | 2251             | 55          | Examiner ac                | ขอก<br>r reply within first month                    |          |  |
| FEE CALCULATION  | 1252       |                             | 2252             | 205         |                            | r reply within second month                          | Ĺi       |  |
| 1. BASIC FILING FEE Large Entity Small Entity  | 1253       |                             | 2253             |             |                            | r reply within third month                           |          |  |
| Fee Fee Fee Fee Description Fee Paid   | •          | 1,450                       | 2254             | 725         |                            | r reply within fourth month                          |          |  |
| Code (\$) Code (\$) 1001 750 2001 375 Utility filing fee   | 1255       | 1,970                       | 2255             | 985         |                            | r reply within fifth month                           |          |  |
| 1002 330 2002 165 Design filling fee   | 1401       |                             | 2401             | 160         | Notice of Ap               | • •  |          |  |
| 1003 520 2003 260 Plant filing fee   | 1402       | 320                         | 2402             |             | •                          | in support of an appeal                              |          |  |
| 1004 750 2004 375 Reissue filing fee   | 1403       |                             | 2403             |             | Request for o              | •              |          |  |
| 1005 160 2005 80 Provisional filing fee  | 1451       | 1,510                       | 1451             | 1,510       | Petition to ins            | stitute a public use proceeding                      |          |  |
| SUBTOTAL (1) (\$) 750.00   | 1452       | 110                         | 2452             |             |                            | vive - unavoidable                                   |          |  |
|  | 1453       | 1,300                       | 2453             | 650         | Petition to re             | vive - unintentional                                 |          |  |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE  | 1501       | 1,300                       | 2501             | 650         | Utility issue f            | ee (or reissue)                                      |          |  |
| Ext <u>ra Claims below Fee Paid</u>  | 1502       | 470                         | 2502             | 235         | Design issue               | fee  |          |  |
| Total Claims   55   -20** =   85   x   18   =   630  | 1503       | 630                         | 2503             | 315         | Plant issue for            | ee   |          |  |
| Independent 7 - 3** = 4 x 84 = 336  Multiple Dependent   | 1460       | 130                         | 1460             | 130         | Petitions to t             | he Commissioner                                      |          |  |
| [  | 1807       | 50                          | 1807             | 50          | Processing for             | ee under 37 CFR 1.17(q)                              |          |  |
| Large Entity   Small Entity<br>  Fee   Fee   Fee   Fee   Description   | 1806       | 180                         | 1806             |             |                            | of Information Disclosure Stmt                       |          |  |
| Code (\$) Code (\$)  | 8021       | 40                          | 8021             | 40          | Recording ea               | ch patent assignment per<br>es number of properties) | 40.00    |  |
| 1202 18 2202 9 Claims in excess of 20  | 1809       | 750                         | 2809             | 375         | Filing a subm              | nission after final rejection                        |          |  |
| 1201 84 2201 42 Independent claims in excess of 3 1203 280 2203 140 Multiple dependent claim, if not paid                  | 4040       | 750                         | 0010             | a~-         | (37 CFR 1.12               | ` "  |          |  |
| 1204 84 2204 42 ** Reissue independent claims  | 1810       | 750                         | 2810             |             | examined (37               | litional invention to be<br>7 CFR 1.129(b))          |          |  |
| over original patent   | 1801       |                             | 2801             |             |                            | Continued Examination (RCE)                          | [        |  |
| 1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent  | 1802       | 900                         | 1802             | 900         | of a design a              | expedited examination pplication                     |          |  |
| SUBTOTAL (2) (\$) 966.00   |            | ther fee (specify)          |                  |             |                            | ╼═┪╏   |          |  |
| **or number previously paid, if greater; For Reissues, see above *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00 |            |                             |                  |             |                            |  |          |  |
| SUBMITTED BY (Complete (if applicable)   |            |                             |                  |             |                            |  |          |  |
| Name (Print/Type) Sanders N. Hillis  |            | Registrat                   |                  | 45,7        | 712                        | Telephone 317-636-0886                               |          |  |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Date

UNE ZY

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Application of   |   |  |  |  |
|--|---|--|--|--|
| Applicant: Gerald R. Stanley   | ) Group Art Unit: Not Yet Assign<br>)<br>) Examiner: Not Yet Assigned |  |  |  |
| Serial No.: Not Yet Assigned   | )   |  |  |  |
| Filed: Herewith  | )<br>)<br>)   |  |  |  |
| For: SERIES INTERLEAVED BOOST CONVERTER POWER FACTOR CORRECTING POWER SUPPLY | )<br>)<br>)<br>)  |  |  |  |
| Our Reference: 11336/513 (P03087US)  | ĺ   |  |  |  |

## Certificate of Mailing Under 37 C.F.R. 1.10

MAIL STOP PATENT APPLICATION The Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Postage Prepaid, Express Mail Label No. EV227676912US in an envelope addressed to: MAIL STOP PATENT APPLICATION, The Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, July 24, 2003.

Carolyn Beaon-Wnjlf Carolyn Beason-Wright

BRINKS HOFER GILSON & LIONE One Indiana Square, Suite 1600 Indianapolis, IN 46204 (317) 636-0886 (telephone) (317) 634-6701 (facsimile)